

**IN THE UNITED STATES BANKRUPTCY COURT
FOR THE DISTRICT OF DELAWARE**

In re:

FTX TRADING LTD., *et al.*,

Debtors.

)
) Chapter 11

)
) Case No. 22-11068 (JTD)
) (Jointly Administered)

)
) **Hearing Date: March 20, 2024 at 10:00 a.m. (ET)**
) **Obj. Deadline: March 8, 2024 at 11:59 p.m. (ET)**

**OBJECTION OF FONDATION SERENDIPITY, FONDATION ELEMENTS,
SERENDIPITY NETWORK LTD AND LIQUIDITY NETWORK LTD TO THE
DEBTORS' MOTION TO ESTIMATE CLAIMS BASED ON DIGITAL ASSETS**

Date: March 8, 2024

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Fondation Serendipity, Fondation Elements, Serendipity Network Ltd. and Liquidity Network Ltd (collectively, the “**Foundations**”), by and through their undersigned counsel, hereby submit this objection (the “**Objection**”) to the *Motion of Debtors to Estimate Claims Based on Digital Assets* [D.I. No. 5202] (the “**Estimation Motion**”)¹ filed by the debtors and debtors-in-possession (collectively, the “**Debtors**”) in the above-captioned chapter 11 cases (the “**Chapter 11 Cases**”). In support of their Objection, the Foundations state as follows:

PRELIMINARY STATEMENT

1. There is no debate that these Chapter 11 Cases should be about valuing Claims and compensating victims of the fraud perpetrated by FTX, Sam Bankman-Fried and others acting at his direction. However, instead of viewing holders of MAPS and OXY tokens as victims of FTX’s fraud and affording them an ability to participate in recoveries alongside other customers, the Debtors seek, instead, to victimize holders of these Digital Assets once again, this time by purporting to estimate Claims for MAPS and OXY tokens as having zero value as of the Petition Date.

2. To do so, the Debtors rely on novel methodologies devised by their valuation witnesses, Kevin Lu and Professor Sabrina T. Howell. Their methodologies are largely untested and fall outside of the mainstream of valuation techniques employed by professionals to value Digital Assets. The Debtors instructed Professor Howell to conduct a valuation analysis on the basis of assumptions that are contrary to fact, law and any rational effort to maximize value. Specifically, the Debtors instructed Professor Howell to estimate the value that the Debtors could realize assuming that they conducted an orderly liquidation of *their* holdings of Digital Assets commencing as of the Petition Date, notwithstanding this has no bearing on the estimating Claims

¹ Capitalized terms used but not defined herein shall have the meanings set forth in the Estimation Motion.

to Digital Assets as of the Petition Date from the perspective of creditors. In addition, Professor Howell assumes a connection between FTX and Sam Bankman-Fried and the underlying applications with respect to which the MAPS and OXY tokens were issued and listed that simply does not exist. The reality is that the ownership and control of the Maps.me and Oxygen.org applications and the undersigned Foundations are completely independent from FTX and Sam Bankman-Fried.

3. In reliance on those flawed assumptions and instructions, Professor Howell applied what she labels an “Asset Liquidation Discount” to render claims for MAPS and OXY tokens valueless, with her formula in some cases purporting to discount them by thousands of times more than their Petition Date price. The Asset Liquidation Discount used by Professor Howell, however, is not based on an asset discount model at all, but rather a theoretical model with little relevant empirical support that aspires to predict transaction costs (not discounts) across a wide array of markets. Professor Howell’s application of the Asset Liquidation Discount to discount Claims for MAPS and OXY tokens does not survive scrutiny.

4. In contrast to the methodologies used by the Debtors’ witnesses, the expert retained by the Foundations, Fotios Konstantinidis of Stout Risius Ross, LLC (“**Stout**”), uses valuation methodologies regularly employed by valuation professionals tasked with valuing portfolios of Digital Assets in the real world. In applying robust and proven techniques that have been reviewed and adjudged to be credible by courts in valuation disputes, Mr. Konstantinidis provides a fair and reasonable estimate of the value of the MAPS and OXY tokens as of the Petition Date in a manner that accounts for both discounts for the lack of marketability of locked tokens as of the Petition Date and blockage – or “asset liquidation” as Professor Howell terms it – arising from the hypothetical liquidation of the Foundations’ holdings of their portfolios of MAPS and OXY tokens

over time. For the reasons stated herein, the Debtors' proposal to estimate all Claims for MAPS and OXY tokens at zero as of the Petition Date should be rejected. Instead, the methodology adopted by Mr. Konstantinidis to estimate the Petition Date value of the Claims to MAPS and OXY tokens of the Foundations in the aggregate amount of \$180,252,918 should be accepted and applied to other Claims to MAPS and OXY tokens.

FACTUAL BACKGROUND

A. Maps.me and Oxygen.org Ecosystems

5. Maps.me is the world's leading offline mapping application. Maps.me has been trusted by over 140 million users. Tens of millions of people use Maps.me each year to navigate across 195 countries. Its features include a natively integrated wallet that allows users to discover, review and book experiences directly. Maps.me adopted MAPS tokens as its ecosystem token.

6. The founders of Maps.me obtained seed capital from affiliates of Alameda Research Ltd and partnered with FTX Trading Ltd. in connection with the minting, listing and initial sales of MAPS tokens. Maps.me's token infrastructure is built on the Solana blockchain. At no point in its existence, however, has Sam Bankman-Fried or any of his associates or FTX Trading Ltd, Alameda Research Ltd. or any of its or their affiliates, including the Debtors, held any ownership interest in or otherwise controlled the entities that own and operate Maps.me or the Maps.me Foundation (defined below).

7. Oxygen.org is a decentralized finance ecosystem offering a prime brokerage service protocol and a non-custodial mobile wallet. Its on-chain prime brokerage is built on Solana's scalable blockchain and seeded by millions of users of Maps.me. Oxygen.org adopted OXY tokens as its ecosystem token.

8. Like Maps.me, the founders of Oxygen.org obtained seed capital from affiliates of Alameda Research Ltd and partnered with FTX Trading Ltd. in connection with the minting,

listing and initial sales of OXY tokens. At no point in its existence, however, has Sam Bankman-Fried or any of his associates or FTX Trading Ltd, Alameda Research Ltd. or any of its or their affiliates, including the Debtors, held any ownership interest in or otherwise controlled the entities that own and operate Oxygen.org or the Oxygen.org Foundation (defined below).

B. Parties

9. Fondation Serendipity (“**Serendipity Foundation**”) is organized as a private foundation under Swiss law. Its principal mission is to supervise the issuance and deployment of MAPS tokens, including community tokens, for the benefit of the Maps.me ecosystem. Serendipity Foundation has no ultimate beneficial owners. Several independent directors, who are unaffiliated with the Maps.me and Oxygen.org ecosystems, are responsible for its corporate decision making. Serendipity Foundation’s organizational structure, which is sometimes referred to as a decentralized autonomous organization, or DAO, is commonly used in decentralized finance projects featuring Digital Assets.

10. Serendipity Network Ltd (“**SNL**” and, together with Serendipity Foundation, the “**Maps.me Foundation**”) is Serendipity Foundation’s wholly-owned subsidiary. SNL was formed for the primary purpose of issuing MAPS tokens.

11. Fondation Elements (“**Elements Foundation**”) is organized as a private foundation under Swiss law. Like Serendipity Foundation with respect to the Maps.me ecosystem, Elements Foundation’s principal mission is to supervise the issuance and deployment of OXY tokens, including community tokens, for the benefit of the Oxygen.org ecosystem. An independent director, who is unaffiliated with the Oxygen.org ecosystem, is responsible for its corporate decision making. Elements Foundation’s organizational structure, which is sometimes referred to as a decentralized autonomous organization, or DAO, is commonly used in decentralized finance projects featuring Digital Assets.

12. Liquidity Network Ltd (“LNL” and, together with Elements Foundation, the “**Oxygen.org Foundation**”) is Elements Foundation’s wholly-owned subsidiary. LNL was formed for the primary purpose of issuing OXY tokens.

C. Claims

13. Serendipity Foundation serves as custodian for 2 billion MAPS tokens issued for eventual deployment into the Maps.me ecosystem to support its development. Additionally, in view of the critical role to be played by the Maps.me ecosystem in seeding the development of the Oxygen.org ecosystem, Serendipity Foundation holds 1 billion OXY tokens. Serendipity Foundation has maintained an account with the Debtors in which, as of the Petition Date, it held its allocation of MAPS and OXY tokens.² Serendipity Foundation’s account with the Debtors was subject to FTX’s Terms of Service.

14. Elements Foundation serves as custodian for 2 billion OXY tokens issued for eventual deployment into the Oxygen.org ecosystem to support its development. Elements Foundation has maintained an account with the Debtors in which, as of the Petition Date, it held its allocation of OXY Tokens. Elements Foundation’s account with the Debtors was subject to FTX’s Terms of Service.

15. On June 30, 2023, and September 28, 2023, the Foundations filed proofs of claim asserting customer claims against the Debtors. Serendipity Foundation filed a customer claim for 2 billion MAPS tokens and 1 billion OXY tokens as of the Petition Date. Serendipity Foundation liquidated its claim by multiplying the number of MAPS tokens by \$0.1072, which was the price

² Although Serendipity Foundation has held 2 billion MAPS tokens and 1 billion OXY tokens since the initial issuance and minting of such tokens, to date, the Schedules and Statements filed by the Debtors do not reflect Serendipity Foundation’s MAPS tokens. The position set forth in the Debtors’ Schedules and Statements omitting MAPS tokens from Serendipity Foundation’s account is plainly erroneous and should be corrected. Serendipity Foundation reserves all right with respect to this error.

per token of MAPS, and by multiplying the number of OXY tokens by \$0.03232, which was the price per token of OXY, in each case as sourced from CoinMarketCap on the Petition Date, for an aggregate liquidated claim amount of \$246,720,000.³

16. Based on the Expert Report of Fotios Konstantinidis dated January 26, 2024 prepared for the Foundations (the “**Konstantinidis Report – Foundations**”) in response to the Debtors’ Estimation Motion, Serendipity Foundation now believes that the aggregate liquidated claim amount of its claim is \$141,292,175, comprised of MAPS tokens worth \$121,633,079 and OXY tokens worth \$19,659,096 as of the Petition Date.⁴ Serendipity Foundation is prepared to supplement and amend its filed proofs of claim against the Debtors in this amount.

17. Elements Foundation filed a customer claim for 2 billion OXY tokens as of the Petition Date. Elements Foundation liquidated its claim by multiplying the number of OXY tokens by \$0.03232, as sourced from CoinMarketCap on the Petition Date, for an aggregate liquidated claim amount of \$64,640,000 as of the Petition Date.⁵

18. Based on the Konstantinidis Report – Foundations, Elements Foundation now believes that the aggregate liquidated claim amount of its claim is \$38,960,743 as of the Petition Date. Elements Foundation is prepared to supplement and amend its filed proofs of claim against the Debtors in this amount.

D. Procedural Posture

³ 471,232,877 MAPS tokens were unlocked and 1,528,767,123 MAPS tokens were locked as of the Petition Date. 179,389,312.97709919 OXY tokens were unlocked and 820,610,687.02290081 OXY tokens were locked as of the Petition Date.

⁴ A copy of the Konstantinidis Report – Foundations is attached hereto as Exhibit A. In addition, on the same date, Mr. Konstantinidis prepared and submitted an expert report for Maps Vault Ltd (the “**Konstantinidis Report – Maps Vault**”). A copy of the Konstantinidis Report – Maps Vault is attached hereto as Exhibit B. The analysis from the Konstantinidis Report – Maps Vault applies to the Konstantinidis Reports – Foundations.

⁵ 358,778,625.95419838 OXY tokens were unlocked and 1,641,221,374.04580162 OXY tokens were locked as of the Petition Date.

19. On November 2, 2023, the Oxygen.org Foundation transferred its claims against the Debtors to Lavanda Sands, L.L.C. (“**LSL**”). LSL supports this Objection.

20. On December 16, 2023, the Debtors filed (i) the *Joint Chapter 11 Plan of Reorganization of FTX Trading Ltd. and its Debtor Affiliates* [D.I. 4861], (ii) the *Disclosure Statement for Debtors’ Joint Chapter 11 Plan of Reorganization of FTX Trading Ltd. and its Affiliated Debtors and Debtors-in-Possession* [D.I. 4862] (the “**Disclosure Statement**”), and (iii) the *Motion of Debtors for Entry of an Order (I) Approving the Adequacy of the Disclosure Statement; (II) Approving the Solicitation Packages; (III) Approving the Forms of Ballots; (IV) Establishing Voting, Solicitation and Tabulation Procedures; and (V) Establishing Notice and Objection Procedures for the Confirmation of the Plan* [D.I. 4863] (the “**Solicitation Procedures Motion**”).

21. On December 27, 2023, the Debtors filed the Estimation Motion requesting the entry of an order pursuant to sections 105(a) and 502(c) of the Bankruptcy Code estimating the value of MAPS and OXY tokens at \$0.00 as of the Petition Date and, accordingly, the value of the Foundations’ customer claims at \$0.00 for voting, plan confirmation and distribution purposes.

22. The Debtors have stated that they intend to file a further amended Plan and Disclosure Statement to incorporate their recently announced settlement with the Joint Official Liquidators of FTX Digital Markets Ltd. [D.I. 4904] and certain other changes, including the Digital Assets Conversion Table requested by the Estimation Motion.

23. On January 31, 2024, the Court held a hearing on the Estimation Motion.

24. On February 7, 2024, the Court entered the *Order Granting Motion of Debtors to Estimate Claims Based on Digital Assets* [D.I. 7090] estimating claims for Digital Assets, but excluding MAPS, OXY, SRM and BOBA Digital Assets (collectively, the “**Deferred Digital**

Assets”), with all rights reserved, and the valuation with respect to such Deferred Digital Assets to be addressed by further order of the Court.

25. On February 9, 2024, the Court entered an *Order Approving Stipulation and Agreed Scheduling Order* [D.I. 7218] setting March 20, 2024, as the date for the evidentiary hearing to be held with respect to the Deferred Digital Assets.

OBJECTION

I. The Debtors’ Estimation Approach is Incorrect as a Matter of Law and the Methodologies that the Debtors’ Witnesses Employ Substantially Overstate Digital Asset Discounts

A. Bankruptcy Courts Are Bound to Follow Bankruptcy and Applicable Non-Bankruptcy Law in Estimating Claims.

26. A bankruptcy court’s discretion to estimate claims under section 502 of the Bankruptcy Code is not unfettered. *In re Pac. Gas & Elec. Co.*, 295 B.R. 635, 642 (Bankr. N.D. Cal. 2003) (“This court is required to follow the substantive law governing the nature of the claim . . .”). The Third Circuit has held that, in estimating claims, a bankruptcy court “is bound by the legal rules which may govern the ultimate value of the claim. For example, when the claim is based on an alleged breach of contract, the court must estimate its worth in accordance with accepted contract law.” *Bittner v. Borne Chemical Co.*, 691 F.2d 134, 135 (3d Cir. 1982). As the Supreme Court has held, the rights of creditors in bankruptcy arise under and are determined with respect to their rights under applicable non-bankruptcy law, subject to provisions of the Bankruptcy Code. *See Raleigh v. III. Dept. of Revenue*, 530 U.S. 15, 20 (2000) (“Creditors’ entitlements in bankruptcy arise in the first instance from the underlying substantive law creating the debtor’s obligation, subject to any qualifying or contrary provisions of the Bankruptcy Code. The ‘basic federal rule’ in bankruptcy is that state law governs the substance of claims, Congress having ‘generally left the determination of property rights in the assets of a bankrupt’s

estate to state law.” (internal citations omitted)). Moreover, it is a general principle that, “for bankruptcy purposes, state law governs the validity and amount of a claim.” *In re Fed.-Mogul Glob. Inc.*, 330 B.R. 133, 155 (D. Del. 2005) (recognizing that to accomplish the underlying purposes of the Bankruptcy Code, in estimating the total liability of pending and future asbestos-related claims, the bankruptcy court is bound by the legal rules that govern the ultimate value of the claim); *see also Owens Corning v. Credit Suisse First Bos.*, 322 B.R. 719, 721 (D. Del. 2005) (concluding that, because pending and future asbestos claims arise under state law, the “reasonable estimation” of their value is determined by state law.).

B. Applicable Law Requires Claims To Be Estimated and Valued as of the Petition Date from the Perspective of the Creditor, Not From the Perspective of the Debtors Based On the Hypothetical Value They Could Realize From an Orderly Liquidation of Their Holdings of Digital Assets Commencing on the Petition Date.

27. A critical issue raised by the Debtor’s Estimation Motion is whether the amount of Claims for Digital Assets should be estimated as of the Petition Date by reference to the value that *customers* could have realized if they had been able to liquidate *their* portfolios of Digital Assets, or by reference to the value that *the Debtors* could have realized if they had conducted an orderly liquidation of *their* holdings of Digital Assets as of the Petition Date. The Debtors posit, without attribution or support, that the correct approach is to estimate Claims for Digital Assets as of the Petition Date based on the value *the Debtors* would have realized upon an orderly liquidation of their holdings of Digital Assets commencing on the Petition Date. *See* Estimation Motion at ¶ 29. They instructed Professor Howell to conduct her valuation analysis accordingly. *See Declaration of Sabrina T. Howell In Support of Motion of Debtors to Estimate Claims Based on Digital Assets* [D.I. 5203] (the “**Howell Declaration**”) at ¶ 4. But the Debtors are wrong. The Bankruptcy Code and applicable non-bankruptcy law provide that Claims should be estimated from the perspective of what creditors could have realized from their portfolios of Digital Assets as of the Petition Date,

not the Debtor from its holdings—*which were not sold on the Petition Date* (and have not yet been sold).

1. **Claims are Determined from the Perspective of Creditors.**

28. “Claim” is defined (in relevant part) broadly under the Bankruptcy Code to mean a “right to payment, whether or not such right is reduced to judgment.” Bankruptcy Code § 101(5)(A). Section 502(b) of the Bankruptcy Code provides that the amount of a claim must be determined in the lawful currency of the United States as of the Petition Date. That claim amounts are determined from the perspective of the creditor, not the debtor, makes sense because it is the debtor, not the creditor, who filed for bankruptcy protection and the creditor, not the debtor, who is harmed. *See, e.g., Specialty Prods. Holding Corp. v. Official Comm. of Asbestos Personal Injury Claimants (In re Specialty Prods. Holding Corp.)*, 2014 U.S. Dist. LEXIS 15682, *5-6 (D. Del. Feb. 7, 2014) (noting that the primary issue in the asbestos cases is the amount of recovery for those suffering from or who may in the future suffer from injuries relating to exposure to asbestos); *see also Diamond Fortress Techs, Inc. v. EverID, Inc.* 274 A.3d 287, 304 (Del Sup April 14, 2022) (“Under Delaware law, the standard remedy for breach of contract is based on the reasonable expectations of the parties that existed before or at the time of breach. It is well-settled that breach of contract damages ‘are designed to place the injured party . . . in the same place as he would have been if the contract had been performed. Such damages should not act as a windfall. Accordingly, when assessing such damages, the non-breaching party is entitled to recover damages that arise naturally from the breach or that were reasonably foreseeable at the time the contract was made.’”). “This necessarily means that the claims are to be appraised on the basis of what would have been a fair resolution of the claims *in the absence of bankruptcy*.” *Owens Corning*, 322 B.R. at 722 (emphasis added); *In re Specialty Prods. Holding Corp.*, 2013 Bankr. LEXIS 2051, *83 (Bankr.

D. Del. May 20, 2013) (same); *In re Garlock Sealing Techs., LLC*, 504 B.R. 71, 94 (Bankr. W.D. N.C. 2014) (same).

2. Hindsight Should Not Inform Claim Estimation as of the Petition Date.

29. When determining the amount of a creditor’s claim, the claim should be determined as of the Petition Date, without the benefit of hindsight or consideration of *ex post facto* events. In *Sears v. Sears (In re Sears)*, the Eighth Circuit held that “[w]hen a party in interest objects to a creditor’s claim, the bankruptcy court ‘shall determine the amount of such claim . . . as of the date of filing the petition.’ Post-petition conduct thus cannot justify disallowing a proof of claim.” 863 F.3d 973, 978 (8th Cir. 2017) (omitting citations). Likewise, in *Cadle Co. v. Mangan (In re Flanagan)*, the Second Circuit rejected the trustee’s position that the entry by a claimant into a general release after the commencement of a bankruptcy case rendered its claim unenforceable under section 11 U.S.C. 502(b)(1) of the Bankruptcy Code as of the Petition Date. 503 F.3d 171, 178-79 (2d. Cir. 2007). According to the Second Circuit, “[a] plain reading of the statute thus suggests that the bankruptcy court should determine whether a creditor’s claim is enforceable against the debtor as of the date the bankruptcy petition was filed.” *Id* at 179.

30. Determining the amount of an allowed claim as of the Petition Date entails taking a “snapshot” of the debtor’s liabilities as they existed as of the bankruptcy filing. See *In re Promise Healthcare Grp., LLC*, 2023 Bankr. LEXIS 1085, *3 (Bankr. D. Del. Apr. 20, 2023) (“[Section 502(b) means that, unlike other civil litigation in which courts examine the facts as they exist at the time of trial, the decision of a bankruptcy court on a claim objection looks at a ‘snapshot’ of the debtor’s liabilities as they existed as of the bankruptcy filing. If a creditor held a valid ‘right of payment’ against the debtor on the petition date, that creditor is entitled to an allowed claim in bankruptcy.”)

31. Likewise, in ascribing value to financial instruments as of a particular date in time that may later have become worthless, courts are similarly required to consider their value as of the relevant date without the benefit of hindsight. In *Jimmy Swaggert Ministries v. Hayes (In re Hanover Corp.)*, the Fifth Circuit had to consider whether option contracts that one party alleged would never be exercised nonetheless had value at the time the debtor received them. 310 F.3d 796, 801 (5th Cir. 2002). There, the Fifth Circuit rejected the argument that an option had no value because there was no chance it would ever be exercised, stating that:

its adoption would, by permitting the exercise of judgment in hindsight, conflict with basic economics and with Fifth Circuit caselaw. Like all speculative financial instruments, the value of an option can change over time, depending upon the value of the underlying property. This is their nature; options are bought and sold precisely to speculate on or edge against market fluctuation. Without more, the fact that an option has become worthless in no way proves that it was worthless at an earlier date. Thus, consistent with economic reality, this and other circuits unequivocally hold that for purposes of s. 548 the value of an investment, even a risky one, such as we have before us now, is to be determined at the time of purchase.

Id. at 801.

3. **Claim Estimation Should Only Reflect What Was Known as of the Petition Date.**

32. When valuing claims as of the Petition Date or as of any other point in time, courts may consider what was reasonably foreseeable as of such date in determining the claim amount and assessing other potentially relevant factors and considerations. *See, e.g., SIGA Techs., Inc. v. Pharmathene, Inc.*, 132 A.3d 1108 (Del. 2015) (noting that the standard remedy for breach of contract is based on the reasonable expectation of the parties *ex ante* and that a breaching party cannot avoid responsibility for making the other party whole simply by arguing that damages are speculative because of the uncertain world created by the wrongdoer).

33. Here, the Debtors instructed Professor Howell to estimate the value of Claims for Digital Assets, assuming that the Debtors conducted an orderly liquidation of *their* holdings commencing as of the Petition Date. Howell Decl. at ¶ 4. The supposed justification for this assignment is that the Debtors’ Chapter 11 Plan, a draft of which was filed in December of 2023, contemplates that the Debtors will liquidate their assets, including their holdings of Digital Assets, in connection with dollarizing Claims for Digital Assets as of the Petition Date. Supplemental Declaration of Sabrina T. Howell In Support of Motion to Estimate Claims Based on Digital Assets [D.I. 6728-4] (the “**Supplemental Howell Declaration**”) at ¶ 12. This assignment is contrary to principles of Claim valuation under the Bankruptcy Code and applicable law because the Debtors had not sold those Digital Assets as of the Petition Date.

34. The Debtors, in fact, did not conduct an orderly liquidation of any of their Digital Assets holdings, including their holdings of MAPS and OXY tokens, as of the Petition Date. Nor, as of the Petition Date—in *the absence of bankruptcy*—was it foreseeable that the Debtors would propose a Plan that contemplated the mass liquidation of their assets to satisfy Claims for Digital Assets in US Dollars. Users of FTX’s platform had claims to Digital Assets that they believe they owned pursuant to FTX’s Terms of Service (*Ad Hoc Committee of Non-US Customers of FTX.com v. FTX Trading, Ltd*, 1:22-cv-50514-JTD (Bankr. D. Del. 2022) [Adv. D.I. 1] ¶¶ 7, 34-37); the location, custody and control of Digital Assets that were or should have been held by FTX was in flux (*Declaration of John J. Ray III in Support of Chapter 11 Petitions and First Day Pleadings*, filed on November 17, 2022 [D.I. 24] (“**Ray First Day Declaration**”), at ¶¶ 6, 65-68); and numerous market participants believed that restarting FTX’s exchange would present the best way to preserve value and satisfy claims.⁶ Even whether the Debtors should be subject to bankruptcy

⁶ See, e.g., Alexander Saeedy and Alexander Osipovich, “New FTX Chief Says Crypto Exchange Could Restart,” *The Wall Street Journal*, January 19, 2023, available at <https://www.wsj.com/articles/new-ftx-chief-says-crypto->

in the United States or as part of bankruptcy proceedings commenced in the Bahamas was, itself, an open question. *See Emergency Motion for Provisional Relief Pursuant to 11 U.S.C. §§ 105(A), 1519, and 1521, 1:22-cv-50514-JTD (Bankr. D. Del. 2022) ¶ 31; and Declaration of Brian Cecil Simms KC in Support of Petition for Recognition Under Chapter 15 of the Bankruptcy Code, 1:22-cv-50514-JTD (Bankr. D. Del. 2022) ¶ 15.*

35. In that context, there is no reason, other than the inappropriate application of hindsight, to value Digital Assets based on the assumption that the Debtors would commence liquidating their holdings of Digital Assets at all, never mind that the Claims of customers to Digital Assets as of the Petition Date should be discounted based on what the Debtors might in the future do with respect to Digital Assets they happened to hold.

4. Computing the Liquidation Value of Estate Assets Is Not Relevant to Estimating Claims Unless the Bankruptcy Code Specifically Provides Otherwise.

36. The Bankruptcy Code is explicit when the manner of a debtor's liquidation of estate property is relevant to valuing a claim. For example, to determine the value of the secured portion of a creditor's claim, section 506(a) of the Bankruptcy Code provides that the value of the collateral securing such creditor's claim "shall be determined in light of the purpose of the valuation and of the proposed disposition or use of such property." If the value of collateral is less than the amount

[exchange-could-restart-11674143168](#), ("In his first interview since taking over FTX in November, Mr. Ray said that he has set up a task force to explore restarting FTX.com...some customers have praised its technology and suggested that there would be value in rebooting the platform, he said. 'Everything is on the table,' Mr. Ray said. 'If there is a path forward on that, then we will not only explore that, we'll do it.'"); Muyao Shen and Olga Kharif, "FTX Token Jumps After New CEO Says Exchange Could Restart," January 19, 2023, *Bloomberg*, available at <https://www.bnnbloomberg.ca/ftx-token-jumps-after-new-ceo-says-exchange-could-restart-1.1872316>, ("FTX's controversial FTT token surged by more than 40% after the bankrupt company's new chief executive, John J. Ray III, said that he's exploring the possibility of restarting the crypto exchange."); and Dietrich Knauth, "Bankrupt crypto exchange FTX has recovered \$7.3 billion in assets," April 12, 2023, *Reuters*, available at <https://www.reuters.com/technology/bankrupt-crypto-exchange-ftx-has-recovered-73-bln-assets-attorney-2023-04-12/>, ("As it looks to the future, FTX is negotiating with stakeholders about options for restarting its crypto exchange, and it may make a decision on that in the current quarter")

of the creditor's claim, the creditor's secured claim equals the value of the collateral, and the balance of the claim is unsecured, it is *not extinguished*.⁷ There is no similar provision in section 502(c) of the Bankruptcy Code indicating that the liquidation value that a *Debtor* can realize from *its* assets should have any bearing on the estimation of any *creditor's* claim for allowance purposes. *Cf. In re Oakwood Homes*, 449 F.3d. 588, 596-97 (3rd Cir. 2006) (concluding that the use of the term "amount" in section 502(b) of the Bankruptcy Code, rather than "value," suggested that it would be inappropriate to discount the "amount" of a claim to the present value for claim allowance purposes when unmatured interest was already disallowed.).

5. The Debtors' Approach to Estimating Claims Is Inconsistent with the Stockbroker Liquidation Provisions of the Bankruptcy Code Upon Which the Plan is Based.

37. Moreover, although the Debtors are not currently subject to a bankruptcy case under article III of subchapter 7 of the Bankruptcy Code (the "**Stockbroker Liquidation Provisions**"), the Plan proposed by the Debtors borrows heavily from these provisions. It establishes pools of customer and general estate property, affords customers (i) priority Claims against the pool of customer property established under the Plan and, to the extent of any shortfall in customer property, (ii) unsecured Claims against the general estate property pool *pari passu* with other unsecured creditors, provides for the dollarization of Claims as of the Petition Date and the satisfaction of such Claims in cash, rather than in kind.⁸ (*See* Plan §§ 4.2, 4.3.5, 7.2).

38. The Court and the Debtors need to look no further than the Stockbroker Liquidation Provisions to find the correct approach to Claim estimation consistent with the way in which they

⁷ Yet, here, the Debtors seek to extinguish Claims of the Foundations based on the purported impact that the size of their holdings of MAPS and OXY tokens would have on their ability to realize value in an orderly liquidation of such tokens.

⁸ The Debtors note that satisfaction of claims in cash, rather than in kind, is necessary because of the mismatch between customers claims for digital assets and the digital assets they actually custodied as of the Petition Date, and the extent of commingling that *the Debtors* engaged in pre-bankruptcy. (*See* Howell Decl. at ¶ 3.)

formulated the Plan. *See generally* Bankruptcy Code §§ 741–753. COLLIER ON BANKRUPTCY provides that a customer’s “net equity” claim “is a dollar figure calculated by determining what would have been realized *by the customer* had the securities credited to the customer account been liquidated on the filing date. . .” COLLIER ON BANKRUPTCY at ¶ 741.06[1] (emphasis added).

39. Like the Plan, the Stockbroker Liquidation Provisions require customer claims to be valued as of the Petition Date and for the trustee to promptly liquidate customer property to pay such claims in cash. Unlike the Debtors’ proposal in the Estimation Motion, however, under the Stockbroker Liquidation Provisions, “the fact that certain securities cannot be liquidated or that there has been market fluctuation between the filing date and the actual liquidation date is irrelevant in determining a customer’s claim but will certainly impact the size of the fund of customer property.” COLLIER ON BANKRUPTCY at ¶ 748.02. Thus, the Stockbroker Liquidation Provisions socialize gains and losses in the value of the customer property to be shared ratably by all customers, with customer claims to be determined by reference to a hypothetical liquidation of property credited to a customer’s account as of the Petition Date.

6. The Claim Estimation Approach Proposed by the Foundations is Consistent with Bankruptcy and Applicable Non-Bankruptcy Law.

40. The Foundations had a right to the MAPS and OXY tokens that were or should have been credited to their FTX accounts, which they could not exercise because of the FTX Debtor’s bankruptcy proceeding. This is the Claim to be valued as of the Petition Date based on the facts and circumstances at the time *in the absence of bankruptcy*. If the Debtors had no MAPS or OXY tokens, the Foundations would still have a claim for the value of MAPS and OXY tokens as of the Petition Date. If other creditors owned the MAPS and OXY tokens that the Debtors owned as of the Petition, and if those creditors did not sell those tokens on the Petition Date, there would be no basis to value the Foundations’ tokens based on an assumption that the other creditors

would have sold all of their tokens as of the Petition Date (or thereafter). The fact that the Debtors, rather than other creditors, hold MAPS and OXY tokens does not change the analysis.

41. The Foundations' entitlement to MAPS and OXY tokens consisted of tokens that were both unlocked and "locked" (i.e. not freely tradeable) as of the Petition Date. To determine the value of the Foundations' Claims for Digital Assets, it is appropriate to estimate the value of MAPS and OXY tokens, both locked and unlocked, that could be realized from *the hypothetical liquidation by the Foundations* (not by the Debtors) of the tokens that were credited to their accounts. This is the analysis that Mr. Konstantinidis performed. It is only necessary to assume a hypothetical liquidation by the Foundations to ascribe value to tokens as of the Petition Date because the Foundations, like all customers, were otherwise precluded by the automatic stay and the Debtors bankruptcy filing, itself, from realizing value from the Digital Assets credited to their accounts.

C. The Methodologies Used by Professor Howell and Mr. Lu Grossly Overstate the Discount Attributable to MAPS and OXY Tokens as of the Petition Date and Fail to Provide a Fair and Reasonable Estimate of the Value of Claims for such Digital Assets.

42. The methodologies applied by Professor Howell and Mr. Lu, taken together, ascribe zero value to Claims for MAPS and OXY tokens as of the Petition Date, despite the fact each of MAPS tokens and OXY tokens were: (i) listed on cryptocurrency exchanges; (ii) traded by market participants; (iii) had readily observable market prices; and (iv) were associated with applications, Maps.me and Oxygen.org, that were (and are) owned and operated independently from Sam Bankman-Fried, the Debtors and their affiliates. The conclusion that Claims for such Digital Assets were, in actuality, worth zero defies common sense.⁹ The Debtors reach this surprising conclusion

⁹ In general, the methodologies adopted by the Debtors' witnesses apply academic theories to flawed assumptions inconsistent with reality and common sense. For example, the intuition behind the Asset Liquidation Discount is that the fact that the Debtors hold such a large percentage of certain tokens relative to their daily trading volumes means

because the assignment given to Professor Howell and the valuation and discount methodologies she applied suffer from numerous flaws that render them unreasonable and unreliable.

43. In conducting her analysis, Professor Howell applied two distinct methodologies to discount the value of Claims for MAPS and OXY tokens from their Petition Date prices as computed by Mr. Lu. She applied what she termed as an “Asset Liquidation Discount” to adjust the Petition Date prices of MAPS and OXY tokens to reflect the effect of an orderly liquidation of the *Debtors’* holdings of MAPS and OXY tokens commencing on the Petition Date. In addition, she applied a Discount for Lack of Marketability (or “**DLOM**”) to adjust Petition Date prices of locked MAPS and OXY tokens to account for their lack of marketability.

1. **The Model that Professor Howell Uses to Compute the Asset Liquidation Discount is Not a *Discount* Model at All.**

44. Professor Howell bases her computation of the Asset Liquidation Discount on a hypothesis (the “**KO Model**”) developed by Albert S. Kyle and Anna A. Obizhaeva in a paper entitled “*Market Microstructure Invariance: Empirical Hypothesis.*” *Econometrica*, Vol. 84, No. 4, 2016, pp. 1345 – 1404 (“**KO 2016**”). The authors do not position the KO Model as an asset discount methodology. Instead, the authors use the KO Model to make predictions about transaction costs associated with subject trades. *See* KO 2016 at 1401. Professor Howell readily concedes this, stating that she would be “happy to call the asset liquidation discount an asset liquidation transaction cost” (Howell Dep. at 202:20–22) because she views the terms as being synonymous. (*id.* at 46:5–8 (“Q. So are transaction costs and the discount identical? A Yes. They

that they cannot realize any value if they were to sell all such tokens. But, in the real world, if selling all tokens renders them valueless, the Debtors could adopt a strategy to burn or destroy significant portions of the relevant tokens to limit their share of the outstanding supply. *See* Howell Dep. at 60:15–18 (“So, in that case where, again, the debtor has said we’re going to sell 10 tokens and destroy the remainder, one could imagine selling those 10 tokens at a positive price”). The estimation approach advocated by the Debtors, however, is wholly devoid of any rational effort to maximize value, which a fiduciary would and should strive to do with respect to estate property, and is designed to strip the MAPS and OXY tokens of all value.

are different words for the same percent of price.”)).¹⁰ According to Professor Howell, the KO Model produces an estimate of transaction costs which represents a percentage of the Petition Date price of a subject Digital Asset. While transactions costs, liquidity and the price of a subject asset may be correlated, Professor Howell admits that neither she nor the authors of the KO Model conducted any analysis to bridge the relationship between the “transaction costs” computed by the KO Model and the resulting “discount” to apply to the price of any asset, whether Digital Assets generally or OXY and MAPS tokens specifically. *See* Howell Dep. at 207:14–18 (“Did you do anything, any type of research or study to determine what the coefficients [of the KO Model] would be if you used data from the cryptocurrency market? A. I did not.”).

45. Recognized asset *discount* models used by experienced valuation experts are empirically tested to assess their accuracy. For example, the Finnerty, Chaffe, Ghaiderov and Black-Scholes discount models are compared against real-world data, typically restricted stock pricing information, to assess their performance. To date, Professor Howell offers no studies, and she has personally performed none, in which the predictions made by KO Model have been vetted for use as price discounts.

46. Moreover, although Professor Howell’s application of the KO Model renders a 100% “discount” (after her manipulations to reduce purported “discounts” of up to 77,000%) to the prices that the Debtors could realize from their liquidation of MAPS and OXY tokens, when pushed, Professor Howell admits that a hypothetical Seller would realize value for selling MAPS and OXY tokens, although she does not calculate what that amount would be.

Q. Does the price go to zero on the first token?

A. Not necessarily.

Q. What do you mean by that?

A. It is true that for the tokens at issue, there’s a positive market

¹⁰ Relevant excerpts from the transcript of Professor Howell’s February 26, 2024 deposition (the “**Howell Dep.**”) are attached hereto as Exhibit C.

price, and presumably one could sell one token at a positive price. From the perspective of the value of the customer claims at issue here for the debtor's holdings, the share of tokens that could be sold at a positive price is so small as to be negligible and could potentially round to zero with a reasonable number of digits after the decimal point. Therefore, I assign a hundred percent discount.

Q. But it has a positive price, correct?

A. What is it?

Q. The token. The tokens here.

A. The tokens have a positive price.

...

Q. So my question to you is with respect to MAPS and OXY, at what point does the price go to zero?

A. I cannot speculate, but my analysis suggests that the overall proceeds to the estate would be negligible and essentially rounding to zero from the perspective of the large amount of holdings of the debtor, around 400 million for OXY, a billion for MAPS, and 3.7 billion for Serum.

Q. But it's not equal to zero, correct?

A. It's not exactly equal to zero.

Q. So again, my question is: Is it more or less than \$100 million?

A. I cannot speculate on specific amounts.

Q. More or less than \$25 million for MAPS and OXY each?

A. I have not done the analysis to speculate on such amounts.

Howell Dep. at 58:6–23, 61:4–21.

47. Professor Howell insists that the KO Model can be used as a discount model and that the output of the discount model suggests that the Petition Date prices of MAPS and OXY tokens would need to be discounted by over a thousand percent, rendering the price to be realized from the sale of the tokens at zero. But, in the same breath, she acknowledges that the Debtors could, in practice, realize some non-zero value from the sale of MAPS and OXY tokens. Again, although her defective assignment was to estimate the value that the Debtors could realize from the orderly liquidation of their MAPS and OXY tokens as of the Petition Date, she states that she has not analyzed – and cannot speculate regarding – the amount that the Debtors would realize in practice from doing exactly that.

2. **The Asset Liquidation Discount Applied by Professor Howell Produces Irrational Results.**

48. Professor Howell admits that when her assumptions regarding daily trading volume, volatility, Petition Date price and the Debtors' holdings of each of MAPS and OXY tokens are inputted into the KO Model, the KO Model produces percentages of transaction cost (or discount) to price well in excess of 100%. *See* Howell Dep. at 29:3–10 (“My question is: Some of these models are returning a discount of more than 100 percent, correct? A. Correct. And then you modify that down to 100 percent as your opinion, correct? A hundred percent discount? A. Correct.”). Recognizing that discounts percentages can only range from 0 – 100%, Howell takes the cursory step of capping the output of the KO Model at 100%. *Id.* But she did not seek to normalize the KO Model to produce an estimate of discounts that mathematically falls within this range. *Cf.* Ghaidarov, Stillian, “Analysis and Critique of the Average Strike Put Option Marketability Discount Model,” *Working Paper*, 2009 pp. 1 - 15 (“**Ghaidarov 2009**”) (proposing a formula to normalize results of Finnerty model that exceed the upper bound of 100% significantly).

49. Professor Howell's manipulation of the output of the KO Model does not address the substantive issue raised by relying on a “discount” model that purports to suggest that asset discounts can exceed 100%. Howell's use of the KO Model suffers from the same flaws as other discounts for lack of marketability that rendered results in excess of the upper bound of 100%. For example, in 2009, Ghaidarov criticized a discount for lack of marketability that Finnerty developed in 2002 because “the results obtained using Finnerty's formula appear to exceed the upper bound significantly” (Ghaidarov 2009, abstract)—though nowhere near the levels in Professor Howell's model. Noting that, while the size of a marketability discount expressed as a percentage of the initial security price will never exceed 100 percent is reasonably intuitive, Ghaidarov states:

it contrasts with the results from the expression for the price of the average strike put given by Finnerty. Finnerty's formula is known to produce discounts that exceed 100 percent, in particular for larger trading restriction periods (> 6 years).
I investigate the source of the inconsistency

Id. at 3.

50. After adjusting Finnerty's formula to correct for results that exceeded 100%, Ghaidarov concludes that "the marketability discounts implied by Finnerty's model are in fact substantially lower than originally hypothesized. This is because the original formula by Finnerty . . . tends to overprice the average strike put, especially for larger holding periods. . . . It is possible the adjusted formula for the average strike put option will correct for this overvaluation and provide a better empirical fit for the two-year holding period data. Further tests are necessary in order to confirm the reasonableness of the average strike put option marketability discount model with the adjusted formula for the price of the Asian option." (Ghaidarov 2009 at 11)

51. Ghaidarov similarly criticizes an option-based discount for lack of marketability model developed by Longstaff (1995) on the grounds that "the discounts predicted by the model tend to be significant for volatilities over 30 percent and longer holding periods, exceeding the reasonable boundary of 100 percent." (Ghaidarov 2009 at 1)

52. Exceeding the upper bound of 100 percent is precisely the same problem that plagues the KO Model when deployed as a discount model (which it is not). Instead of developing and testing modifications to the KO Model required to normalize its results so that they cannot exceed the upper bound of 100%, Professor Howell simply manipulated the upper bound of the Asset Liquidation Discount to be 100%. Her band-aid approach is inconsistent with the more thoughtful steps taken by commentators like Ghaidarov to improve models that suffer from obvious errors and inconsistencies.

3. Professor Howell's Application of the Asset Liquidation Model is Based on Plainly Erroneous Assumptions.

53. In applying the Asset Liquidation Discount, the Debtors instructed Professor Howell to make plainly erroneous assumptions about the Debtors' rights with respect to Digital Assets. As discussed above, Professor Howell's methodology, with the benefit of hindsight, assumes that an orderly liquidation of the Debtors' holdings of Digital Assets commenced on the Petition Date, even though such a liquidation never occurred and even though the Debtors were considering options other than liquidation as of the Petition Date. Moreover, Professor Howell's methodology incorrectly estimates Claims from the perspective of the Debtors, rather than from the perspective of creditors *in the absence of bankruptcy*. But these are not the only errors.

54. MAPS and OXY tokens were issued subject to a vesting schedule in which locked tokens would remain locked during the first year and thereafter unlock linearly over 6 years with respect to MAPS tokens and linearly over 5 years with respect to OXY tokens, in each case starting on December 2021. See "Maps: White Paper," *Maps.me*, January 2021, available at <https://maps.me/token/MAPS.pdf>; "Oxygen: The Prime Brokerage Protocol," *Oxygen.org*, December 2020, available at <https://oxygen.org/Oxygen.pdf>. The vesting schedule for MAPS and OXY tokens is embedded into MAPS and OXY tokens, themselves, as smart contracts. While the Debtors were charged with "managing" the unlocking process with respect to MAPS and OXY tokens, this role did *not* afford the Debtors any discretion over when and whether MAPS and OXY tokens became unlocked. Notwithstanding this limitation, Professor Howell testified that, in computing the Asset Liquidation Discount, her understanding was that "all of the holdings that [she is] considering in [her] analysis are unlocked from the debtors' perspective." Howell Dep. at 216:24–17. Thus, in Professor Howell's mind, the Debtors could liquidate their holdings of locked MAPS and OXY tokens at any time, irrespective of the unlocking schedule, which she views as

only binding claimants. Among other things, this surprising assumption is inconsistent with the *Order Authorizing and Approving (I) Guidelines for the Sale or Transfer of Certain Digital Assets, (II) the Sale or Transfer of Such Digital Assets in Accordance with such Guidelines Free and Clear of any Liens, Claims, Interests and Encumbrances, (III) the Debtors' Entry into, and Performance Under, Postpetition Hedging Arrangements, including Granting Liens and Superpriority Administrative Expense Claims in Connection Therewith and (IV) the Debtors to Stake Certain Digital Assets* [D.I. 2505] (“For the avoidance of doubt, a smart contract or legal contract ‘lock-up’ of a token (including but not limited to a contractual restriction on transferring such token shall not constitute a lien claim, encumbrance or interest for any purpose of this Order, and nothing in this Order shall be construed as altering any obligations of the Debtors or their representatives to comply with such contractual lock-ups in connection with any sale, transfer or other disposition of Digital Assets”). Worse yet, Professor Howell’s assumption (given to her by Debtors’ counsel) is based upon the Debtors’ ability to sell assets as debtors in possession even though the Foundations’ claims are to be valued “*in the absence of bankruptcy.*” *Owens Corning*, 322 B.R. at 722 (same); *Specialty Prods.*, 2013 Bankr. LEXIS 2051, *83 (same); *Garlock Sealing*, 504 B.R. at 94 (same).

55. If true, however, it underscores that Professor Howell’s Asset Liquidation Discount causes MAPS and OXY token holders to bear a discount to Petition Date prices arising not only from the *Debtors’* hypothetical liquidation of the MAPS and OXY tokens, but also a liquidation conducted *in breach of* such tokens’ vesting schedules, which is contrary to applicable substantive contract law. *See Bittner*, 691 F.2d at 135 (when the claim is based on an alleged breach of contract, the court must estimate its worth in accordance with accepted contract law”). The Debtors’ breach of contract would *increase* (not reduce) the Foundations’ claims contrary to Professor Howell’s Asset Liquidation Discount model, which enables the Debtors *to benefit* from

their breach by *reducing* the estimated value of Claims as a result thereof. A breaching party is not excused from the consequences of their breach, but rather remains liable to the non-breaching party for damages arising therefrom. *See, e.g., Diamond Fortress Techs, Inc.* 274 A.3d at 304.

56. Professor Howell’s resistance to valuing Claims based on the liquidation of each creditor’s portfolio of Digital Assets irrespective of the Debtors’ holdings of such Digital Assets is telling. When questioned about this “hypothetical” in her deposition, Professor Howell responded “. . . but more importantly, *the hypothetical you described causes claims to amount to far more than a hundred percent of what the debtor would ultimately get when they liquidate their holdings in cash.*” Howell Dep. at 130:6–10 (emphasis added). Rather than to estimate Claims for Digital Assets as of the Petition Date, Professor Howell’s methodology appears, instead, designed to eliminate creditors’ Claims to minimize the shortfall between what the Debtors might, in fact, realize from liquidating assets, on the one hand, and the amount of creditors’ Claims in respect of such Digital Assets, on the other hand. While achieving 100% recoveries on Claims is a worthwhile goal in any bankruptcy case, it usually goes without saying that Claims are not allowed by reference to whether there will be sufficient value available to pay them in full. But the Claim estimation approach advocated by the Debtors, to Professor Howell’s point, appears intended to achieve that result here, which, is contrary to valuation principles that ordinarily bifurcate the allowed amount of *creditors’* Claims for Digital Assets from the value ultimately realize from *the Debtors’* Digital Assets (and other assets) comprising property of their estate.

4. **Professor Howell Suggests That Traders with Exposure to MAPS and OXY Tokens Assumed the Risk That FTX Might Liquidate its Holdings and Crash the Price, But Did Not Analyze Whether the Asset Liquidation Discount Was Already Priced In as of the Petition Date.**

57. Professor Howell states that “[w]hen purchasing particular Digital Assets that FTX/Alameda was known to hold in large quantities relative to daily trading volume, a trader

assumes the risk that FTX/Alameda might at any time liquidate its holdings and crash the price.” Suppl. Howell Decl. at ¶ 14. Howell also elects to exclude volume data from and after November 2, 2022, when a CoinDesk article that cast doubt on the health of the Debtors’ balance sheets was published, because she believes that elevated trading activity resulted from reports of FTX’s liquidity crisis. *See Howell Decl.* at App. C ¶ 18. Based on the elevated trading that Professor Howell states occurred after November 2, 2022, and her belief that traders assumed the risk that FTX/Alameda might liquidate their large holdings, it is reasonable to conclude that some, if not all, of the liquidation discount would have been taken into account when pricing of MAPS and OXY tokens as of the Petition Date. It is irrational to assume that a trader “assume[d] the risk” that the Debtors would liquidate their holdings without assuming that the trader factored that potential liquidation into the price of MAPS and OXY tokens. However, Professor Howell did not perform *any* analysis to determine whether and to what extent the Asset Liquidation Discount had been priced in to the Petition Date prices:

Q. (By Mr. Gwynne) So you determined that the asset liquidation discount without regard to whether the market was already efficient with respect to certain information, is that right?

A. I did not conduct an analysis of market efficiency as part of my assignment.

Q. What factors would purchasers in the spot market for MAPS or OXY tokens consider when purchasing them?

A. I cannot speak to the motivations of purchasers of MAPS and OXY tokens.

Q. So in an efficient market, investors would be aware of public information?

A. Investors would be aware of public information, yes.

Q. Like the fact that the debtor had, you know, the vast majority of the MAPS and OXY tokens, right?

A. I would think so, yes.

Howell Dep. at 198:13–199:19.

58. Although Howell concludes that traders would have known that FTX held the vast majority of MAPS and OXY tokens, she did not make any effort to adjust her application of the

Asset Liquidation Discount to reflect that this risk would already have been reflected in the Petition Date prices.¹¹ As a result, Professor Howell’s methodology is based on one-sided assumptions that grossly overstate the discount applicable to MAPS and OXY tokens.

5. The KO Model Is Not Well-Suited to Apply to Volatile Digital Assets Like MAPS and OXY Tokens.

59. The KO Model was developed using a bespoke selection of portfolio transitions effected on the NYSE and NASDAQ in the early 2000s. See KO 2016 at 1367. Although the authors of the KO Model hypothesize that their transaction cost model may produce results that are generalizable to markets for commodities, bonds, currencies and aggregated indices, empirical study has been sparse. Only one published academic paper applies the KO Model to measure liquidity of cryptocurrencies. See Brauneis, Alexander, Ronald Mestel, Ryan Riordan, and Erik Theissen, “How to measure the liquidity of cryptocurrency markets?” *Journal of Banking and Finance*, Vol. 124, 2021, pp. 1-26 (“**Brauneis**”). In 2021, Brauneis et al. investigated the efficacy of liquidity measures, like the KO model, to assess liquidity across various cryptocurrency exchanges in relation to Bitcoin and USD and Ethereum and USD currency pairs. *Id.* Brauneis states that the KO Model “performs rather well in low volume periods but is unable to track liquidity across high volatility periods.” *Id.* at 11. Although the Brauneis study looked at exchange level activity, we note that MAPS and OXY tokens are highly volatile. Moreover, the authors of the KO Model posit that the model’s predictions may hold most closely when, among other factors,

¹¹ In addition, Professor Howell states that analyzing the fundamental value of MAPS and OXY tokens as of the Petition Date was outside the scope of her assignment, but she concedes that the application of an Asset Liquidation Discount could never override the fundamental or intrinsic value of Digital Assets. See Howell Dep. at 169:23–170:6 (“So does that mean that [the asset liquidation discount] would not extinguish [fundamental value], that your discount is independent from the fundamental value that MAPS or OXY tokens may have? A. My discount is an estimate of the likely price at which the debtor could sell its holdings. It is not a measure of fundamental value, and it doesn’t – therefore, the discount estimate itself cannot destroy fundamental value in any way.”). This is yet another example of how the methodologies employed by the Debtors to estimate the Petition Date value of Claims to MAPS and OXY tokens are likely to significantly overstate the amount of the discount to Petition Date prices that should be applied.

market makers are competitive. KO 2016 at 1348. Here, Professor Howell notes that over 99% of issued MAPS and 97% of issued OXY tokens are held by the Debtors. Where there is one holder holding such a significant portion of the outstanding issue of particular tokens, there is unlikely to be sufficient competition among market makers for the KO Model's predictions to be expected to hold. *See id.*

60. Other applications of the KO Model have nothing to do with predicting asset level discounts (or even transactions costs) at all; rather, the authors of the KO Model seek to apply it to predict historical market crashes based on its assessment of illiquidity. Kyle, Albert S & Obizhaeva, Anna A., “Large Bets and Stock Market Crashes” *Review of Finance*, 2023, pp 2164 – 2203 (“**KO 2023**”).

6. The Volume Inputs that Professor Howell Used to Compute an Asset Liquidation Discount for MAPS and OXY Tokens Are Overly Conservative and Backwards Looking.

61. To estimate daily trading volume for MAPS and OXY tokens for use in the “discount” models that she applies, Professor Howell used average trading volumes from November 2, 2022, through November 1, 2023. Professor Howell sourced volume data from Coin Metrics relying on a subset of trusted exchanges that she and Coin Metrics identified. Professor Howell's selection of a limited number of trusted exchanges to determine volume data entirely excludes from consideration trading volumes of MAPS and OXY tokens that occurred on decentralized exchanges during the subject period. Additionally, Professor Howell's selection of trusted exchanges omits certain exchanges, including LBank, Local Bitcoin and BZ, which, in the case of LBank, was ranked *similarly* to other exchanges that Professor Howell relied on for volumes with respect to SRM. *See Howell Decl.* at App. C ¶ 11. Professor Howell excluded these exchanges on a recommendation that she received either directly or indirectly from Mr. Lu. *See Howell Dep.* at 180:5–181:7 (referencing instructions from Mr. Lu to exclude three exchanges).

62. Professor Howell states that she relied on data from only a handful of exchanges to mitigate the effect of wash trading and fake volumes, which she suggests is rampant. Despite her concerns regarding wash trading and fake volumes, Professor Howell did not conduct any analysis to determine the extent to which, if at all, trading volumes attributed to MAPS and OXY tokens had been affected by wash trading or fake volumes. *See* Howell Dep. at 43:25–44:18.

63. Moreover, Professor Howell elected to assume that the daily trade volumes that she derived from a limited subset of exchanges during the year prior to the Petition Date would be representative of trading volumes for MAPS and OXY tokens after the Petition Date even though, as Professor Howell knows, the passage of time results in a greater and greater percentage of MAPS and OXY tokens becoming unlocked and freely tradeable. Moreover, Professor Howell ascribes no likelihood to the possibility that, over time, as the underlying Maps.me and Oxygen.org ecosystems matured, OXY and MAPS tokens would be deployed for use by users consistent with the vision set forth in their respective White Papers, thereby increasing trade volumes. In fact, despite increasing amounts of MAPS and OXY tokens become unlocked over time, Professor Howell assumed static levels of trading at all relevant times—despite market data that trading significantly increases when additional tokens are unlocked.

64. Accordingly, estimates regarding daily trading volume that Professor Howell uses to calculate the discounts attributable to MAPS and OXY tokens grossly underestimates the projected trading volumes reasonably attributable to MAPS and OXY trading activity following the Petition Date (assuming the creditors had possession of their tokens).

7. Mr. Lu’s Estimate of Petition Date Prices for MAPS and OXY Tokens is Based on A Needlessly Limited Data Set and Using a Methodology that Ignores Price on Principal Markets.

65. To determine Petition Date prices for MAPS and OXY tokens, Mr. Lu examined trades on certain trusted exchanges with respect to MAPS and OXY tokens. However, his

methodology resulted in obtaining Petition Date pricing data from only one exchange (Gate.io) with respect to MAPS tokens and just three exchanges (Gate.io, Bitfinex and Kraken) with respect to OXY tokens. And, instead of picking the principal market to use for pricing purposes, Mr. Lu opted to use a lower volume exchange. Lu concedes that, all else equal, it is better to use multiple sources of information for pricing data: “Q. So in your view, when trying to determine an accurate price, it's best to look at multiple sources of information? A. Yes.” Lu Dep. at 165:18–21.¹²

But, with respect to determining the Petition Date price for MAPS and OXY tokens, Lu’s data is based on an exceedingly small sample size.

II. The Valuation Methodology Used by Mr. Konstantinidis Provides a Fair and Reasonable Estimate of the Value of Claims for MAPS and OXY tokens as of the Petition Date.

66. The valuation methodology used by Mr. Konstantinidis (such methodology, the “**Stout Valuation Analysis**”) corrects the defects in the methodology adopted by the Debtors’ valuation witnesses. First, consistent with the purpose of claim allowance and estimation, it estimates Claims for Digital Assets based on the perspective of creditors, and not the Debtors. Accordingly, the Stout Valuation calculates the value of MAPS and OXY tokens as of the Petition Date based on the orderly liquidation of such creditor’s holdings of such Digital Assets commencing as of the Petition Date. It does not determine the value of customer claims by (improperly) assuming that the Debtors conducted a liquidation of all of their holdings of MAPS and OXY tokens as of the Petition Date.

67. Second, it uses tested and reasonable methodologies to determine relevant valuation inputs, namely the spot price of the relevant Digital Asset as of the Petition Date, the

¹² Relevant excerpts from the transcript of Mr. Lu’s March 1, 2024 deposition (the “**Lu Dep.**”) are attached hereto as Exhibit D.

projected daily trading volume of the relevant Digital Assets during the liquidation period, and the volatility associated with the relevant Digital Assets. Konstantinidis Report – Foundations at ¶¶ 20 - 21. Having calculated these inputs, the Stout Valuation Methodology then, to address the blockage discount, makes an informed assumption that a creditor would be able to liquidate its holdings of the relevant Digital Assets in the amount of up to 10% of the average daily trading volume without impacting its price. *Id.* at ¶ 17. And, to compute a discount for lack of marketability of tokens that were locked as of the Petition Date, applies the average of the output of the well-established Finnerty Model and Chaffe Model. *Id.* ¶ 18. Taken together, the Stout Valuation Analysis corrects the methodological errors committed by the Debtors' valuation witnesses whose sum effect is to grossly underestimate the fair and reasonable value of Claims to the relevant Digital Assets as of the Petition Date.

A. The Stout Valuation Analysis Properly Sources Pricing, Trading Volume and Volatility Data from CoinMarketCap.

68. To establish the baseline Petition Date spot price of MAPS and OXY tokens, Mr. Konstantinidis collected price and daily trading volume data from the CoinMarketCap API with respect to OXY and MAPS tokens and computed the 24-hour averages for the 24-hour period before the Petition Time. Konstantinidis Report – Foundations at ¶ 20. The spot prices were \$0.1071257 for MAPS and \$0.0306372 for OXY. *Id.* at 8 n. 5. During the same period, the average daily trading volume (in units) for MAPS was 2,062,501 and 3,085,427 for OXY. In addition, Mr. Konstantinidis used CoinMarketCap data to determine the volatility of the MAPS and OXY tokens using the annualized 9-month average, which Mr. Konstantinidis found to be the optimal interval to ensure volatility estimates properly reflect the most recent price movements. Konstantinidis Report – Foundations at ¶ 20

69. Courts, including courts in Delaware, have adjudged CoinMarketCap data to be credible and reliable for pricing purposes. *See Diamond Fortress Techs., Inc. v. EverID, Inc.*, 274 A.3d 287 (Del. Super. Ct. 2022) (“[T]he Court is satisfied CoinMarketCap is a reliable cryptocurrency valuation tool. As such, the Court will rely on historical pricing data published by CoinMarketCap to determine the proper USD value of [the subject tokens] in calculating the Plaintiffs' forthcoming judgment.”); *see also CFTC v. McDonnell*, 332 F. Supp. 3d 641, 670-71 (E.D.N.Y. 2018) (“CoinMarketCap is used frequently by news publications to report on prices of virtual currencies, including publications that focus on virtual currencies such as CoinDesk and general financial newspapers like the Wall Street Journal and the Financial Times.”); *CFTC v. Reynolds*, 2021 U.S. Dist. LEXIS 38896, 2021 WL 796683, at *4 n.2 (S.D.N.Y. Mar. 2, 2021) (citing *McDonnell*, 332 F. Supp. 3d at 670-71) (holding “CoinMarketCap is a reliable valuation tool for these purposes”); *Hodges v. Harrison*, 372 F. Supp. 3d 1342, 1353 n.1 (S.D. Fla. 2019) (holding an evidentiary hearing “to determine the appropriate manner of calculating the value of Plaintiffs investments” before determining CoinMarketCap was a reliable source to convert cryptocurrency into USD).

70. Indeed, CoinMarketCap (as well as other, similar data aggregators) are also credible sources of volume data that are regularly used in the industry. Professor Howell, for example, relied on CoinMarketCap data to determine trading volume for 44 tokens where Coin Metrics data was not available. *See Howell Decl. at App C ¶ 13*. Additionally, Mr. Konstantinidis, in performing his analysis, compared volumes reported by CoinMarketCap in relation to MAPS and OXY tokens with the volumes reported by Coin Metrics from the trusted and lower trusted exchanges that they track and found that the volume estimates were substantially consistent, taking

into account that CoinMarketCap draws volumes from both centralized and decentralized exchanges. Konstantinidis Dep. at 108:20–109:3.¹³

B. The Stout Valuation Analysis Makes Reasonable Assumptions About the Trading Volume of MAPS and OXY Tokens During the Liquidation Period Using the Empirical Performance of Comparable Tokens.

71. Next, to project daily trading volume data to use prospectively during the liquidation period, Mr. Konstantinidis incorporated the volume trends from 20 comparable cryptocurrencies with average daily volume between \$1 million and \$30 million that are not badged on CoinMarketCap as being stablecoins. Konstantinidis Report – Foundations at ¶ 20. Using comparable tokens to project the trading volume of MAPS and OXY tokens in the future is consistent with the fact that increasing proportions of MAPS and OXY tokens will become unlocked over time. In addition, doing so accounts for the fact that, as of the Petition Date (and to do this day), the intention was (and remains) for MAPS and OXY tokens to be deployed on the applications with respect to which they were issued to serve as utility and governance tokens.¹⁴ The Stout Valuation Analysis does not project fixed, static trading volumes, as Professor Howell does, based on trading information derived from earlier stages in the development and maturity of the ecosystems for which the subject Digital Assets were issued.

C. The Stout Valuation Analysis Applies Robust and Defensible Assumptions Regarding the Trading Activity of Market Participants to Calculate a Blockage – or Liquidation – Discount Using a Methodology That Courts Have Adjudged to Be Credible.

72. In addition, consistent with methods commonly employed by market actors to liquidate large blocks of securities or tokens, the Stout Valuation Analysis assumes that a seller

¹³ Relevant excerpts from the transcript of Mr. Konstantinidis' February 27, 2024 deposition (the "**Konstantinidis Dep.**") are attached hereto as Exhibit E.

¹⁴ Incorporating data from comparable circumstances is a technique regularly employed by valuation professionals in a variety of contexts. *See, e.g., In re Coram Healthcare Corp.*, 315 B.R. 321, 337-38 (Bankr. D. Del. 2004) (assessing standard valuation methodologies including comparable company and comparable transaction analyses.)

can liquidate its holdings gradually over time each day in an amount that does not exceed 10% of the daily trading volume without depressing market price. Although Professor Howell disagrees with this approach, in *Large Bets and Stock Market Crashes*, Kyle and Obizhaeva, the authors that Professor Howell rely on for the KO Model, look favorably upon it, concluding that the common understanding among market participants that large orders may be liquidated by restricting trading quantities to less than 5% or 10% of average trading policies per day is reasonable for trading individual stocks. *See* KO 2023 at 2187 (“Market participants often execute large orders by restricting quantities traded to be not more than 5% or 10% of average daily volume of a period of several days. This heuristic strategy is usually believed to be reasonable for trading individual stocks and thus certainly reasonable for more liquid markets such as markets for stock index futures. While this strategy is reasonable for trading individual stocks, our analysis shows that it may incur much larger-than-expected costs when implemented in more liquid markets.”).

73. Accordingly, to account for what Professor Howell coins as the Asset Liquidation Discount, the Stout Valuation Analysis solves for the blockage discount through the “dribble out” method of selling over time and discounting the projected cash flows to be realized from such sales to present value. Unlike the untested KO Model, this methodology is used regularly by valuation professionals to value restricted stock as well as cryptocurrencies and has been determined to be credible by courts. For example, in *Petitioner v. Commissioner (In re: the Estate of Georgine T. Gimbel)*, the tax court held that the methodology of discounting assuming open market public sales of restricted stock over a period of several years, the dribble out method, best approximated the fair market value of such stock as of the date of the decedent’s death. *See Estate of Georgine T. Gimbel, Deceased, Janet G. Rogers, Joanne M. Gimbel, and Thomas W. Gimbel, Co-Executors and Co-Trustees, Petitioner v. Commissioner of Internal Revenue*, Memorandum Findings of Fact

and Opinion, Docket No. 21250-04, United States Tax Court (December 19, 2006) (declaring that, as “Kimball’s [dribble out] approach appears to be a reasonable and generally accepted method, we adopt Kimball’s dribble-out methodology.”).

D. The Stout Valuation Analysis Uses Proven Methodology to Compute a Discount for Lack of Marketability Attributable to Locked MAPS and OXY Tokens.

74. Finally, to compute a discount for lack of marketability to estimate the value of OXY and MAPS tokens that were locked and, accordingly, not marketable as of the Petition Date, Mr. Konstantinidis took the average of the results implied by the Finnerty Model (which was used by Professor Howell) and the Chaffe Model. Each of the Finnerty Model and the Chaffe Model are discount models that have been empirically tested against and shown to explain the *discounts* to price afforded to non-marketable assets in the real world. Konstantinidis Dep. at 113:13–114:18.

75. Mr. Konstantinidis took the average of the Finnerty Model and the Chaffe Model because the Finnerty Model is said to underestimate discounts at high volatilities and the Chaffe Model is said to overestimate discounts at high volatilities. Konstantinidis Report – Foundations at 7 n.3. Taking the average neutralizes the biases inherent to each of these well-established methods. *Id.*

76. The Stout Valuation Analysis estimates the value of Claims of Elements Foundation to OXY tokens as of the Petition Date in the amount of \$38,960,743, representing a 36.4% discount to the Petition Date price of OXY tokens. *See* Konstantinidis Report – Foundations at ¶¶ 24-5. The Stout Valuation Analysis estimates the value of Claims of Serendipity Foundation to MAPS and OXY tokens as of the Petition Date in the amounts of \$121,633,079 and \$19,659,096, respectively, reflecting discounts of 43.2% and 35.8% of the Petition Date price of MAPS and OXY tokens, respectively. *See id.*

E. The Criticisms Leveled against the Stout Valuation Analysis are Unavailing.

77. Mr. Lu critiques Mr. Konstantinidis for his reliance on CoinMarketCap data because, he says, CoinMarketCap includes wash trading and fake volumes. *See Response of Kevin Lu to Expert Report of Fotios Konstantinidis*, February 9, 2024, at ¶¶ 3–10 (“**Lu Rebuttal Report**”).¹⁵ He relies on several academic papers for this proposition and reporting conducted by Bitwise in 2019. *See id.* at 5 n.7. Mr. Lu acknowledges, however, that CoinMarketCap implemented a series of data transparency measures and improvements intended to mitigate the impact of wash trading and fake volume on its trading data. *See id.* at 5 n.8. While Mr. Lu dismisses these measures as cursory, neither he nor any other academic source cited by either Mr. Lu or Professor Howell has studied whether CoinMarketCap’s information remains flawed. Indeed, Mr. Lu and Professor Howell each admit that they have not personally evaluated the reliability of CoinMarketCap’s data today. *See* Lu Dep. at 151:9–16 (“Have you performed or has anyone at your direction performed any analysis to determine whether any changes implemented by CoinMarketCap after the 2019 Bitwise article improved the reliability of CoinMarketCap’s reported trading volume? A. No, I have not and no one under my direction has done so either.”); Howell Dep. at 174:2–178:8. Moreover, neither Mr. Lu nor Professor Howell ever reviewed CoinMarketCap data or data reported by other exchanges to determine whether fake volume or wash trading implicated trading volumes reported with respect to MAPS and OXY tokens. *See* Lu Dep. at 77:13–78:16; Howell Dep. at 44:7–18.

78. Professor Howell criticizes Mr. Konstantinidis assumption that daily trading volumes of MAPS and OXY tokens will increase from daily trading volume of such tokens during the year prior to FTX’s bankruptcy because, she argues, FTX’s bankruptcy would likely depress

¹⁵ A copy of the Lu Rebuttal Report is attached hereto as Exhibit F.

trading volumes. *See Rebuttal Expert Report of Sabrina T. Howell*, February 9, 2024, at ¶¶ 58–63 (“**Howell Rebuttal Report**”).¹⁶ Professor Howell’s critique misses the mark. First, Mr. Konstantinidis assumptions are based on the empirical performance of 20 comparable tokens selected by Mr. Konstantinidis issued in connection with diverse ecosystems. In Mr. Konstantinidis view, referencing dynamic, real world data is more defensible than locking in arbitrary assumptions that trading volumes will be frozen at pre-petition levels during the liquidation period. Additionally, assuming increasing trading volumes is consistent with the fact, each day, more tokens are unlocking and becoming freely marketable. It stands to reason, and empirical analysis confirms, that as the public float for OXY and MAPS tokens increases, trading volume should increase as well. Moreover, Professor Howell’s consideration of the effect of FTX’s bankruptcy is inconsistent with the fact that the MAPS and OXY tokens are to be valued *in the absence of bankruptcy*.

79. Professor Howell also criticizes Mr. Konstantinidis’ selection of the Finnerty and Chaffe Models to calculate the Discount for Lack of Marketability because these models, and, in particular, the Chaffe Model, perform poorly over longer time horizons for volatile assets. Professor Howell’s criticism does not apply to Mr. Konstantinidis’ use of the Finnerty and Chaffe Model, however, because the liquidation period he contemplates does not exceed 6 – 7 years, and, accordingly, stays well within the shorter time horizons during which the Finnerty and Chaffe Models have been shown to perform well.

F. The Stout Valuation Analysis Provides a Fairer and More Reasonable Basis Upon Which to Estimate Claims than the Debtors’ Methodology.

80. Each step of the Stout Valuation Analysis is reliable and defensible, relies on data derived from observable market sources and applies discounting methodologies that have been

¹⁶ A copy of the Howell Rebuttal Report is attached hereto as Exhibit G.

vetted and accepted by courts, practitioners and supported by relevant academic literature. The methodologies employed by the Debtors, on the other hand, rely on bespoke, highly curated data sources, sometimes reducing the relevant data set to only one data point, and apply purported “discounting” methodologies that have never been vetted by courts or valuation professionals to determine a “discount.” Additionally, the Stout Valuation Analysis applies an approach that is consistent with bankruptcy and non-bankruptcy law applicable to claim valuation.

81. While the Stout Valuation Analysis has been computed to estimate the Claims of the Foundations, specifically, it should be straightforward to expand the approach to determine the value of Claims for all other holders of MAPS and OXY tokens as of the Petition Date. The Claims of the Foundations together with the Claims of Maps Vault represent the lion share of third-party Claims for MAPS and OXY tokens and, accordingly, warrant the discount recommended by Mr. Konstantinidis.

82. For other holders of Claims to MAPS and OXY tokens, it will likely be possible to implement a flat discount to the Petition Date price that would be applicable to Claims below a certain threshold of units. This could be done in much the same way that the Debtors determined not to ascribe the Asset Liquidation Discount to Digital Assets when its impact would amount to a discount of less than 10%. *See* Howell Decl. at ¶ 71. Adopting such an approach would achieve the administrative efficiency that the Debtors seek from estimating Claims without sacrificing fairness to creditors who are entitled to an estimation methodology that values Claims from their perspective in accordance with the requirements of applicable bankruptcy and non-bankruptcy law. *See In re G-I Holdings, Inc.*, 323 B.R. 583, 599 (Bankr. D.N.J. 2005) (noting the goals in claim estimation procedures to further the efficient and expeditious administration of the bankruptcy estate consistent with the legal rules that govern the ultimate value of the claim.).

CONCLUSION

WHEREFORE, for the reasons set forth herein, the Foundations respectfully request that (i) the Court estimate the Claims of the Foundations for MAPS and OXY tokens valued as of the Petition Date in the aggregate amount of \$180,252,918 consistent with the Stout Valuation Analysis and (ii) grant such further relief to the Foundations as is appropriate.

Dated: March 8, 2024
Wilmington, Delaware

Respectfully submitted,

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